

FIG. 2

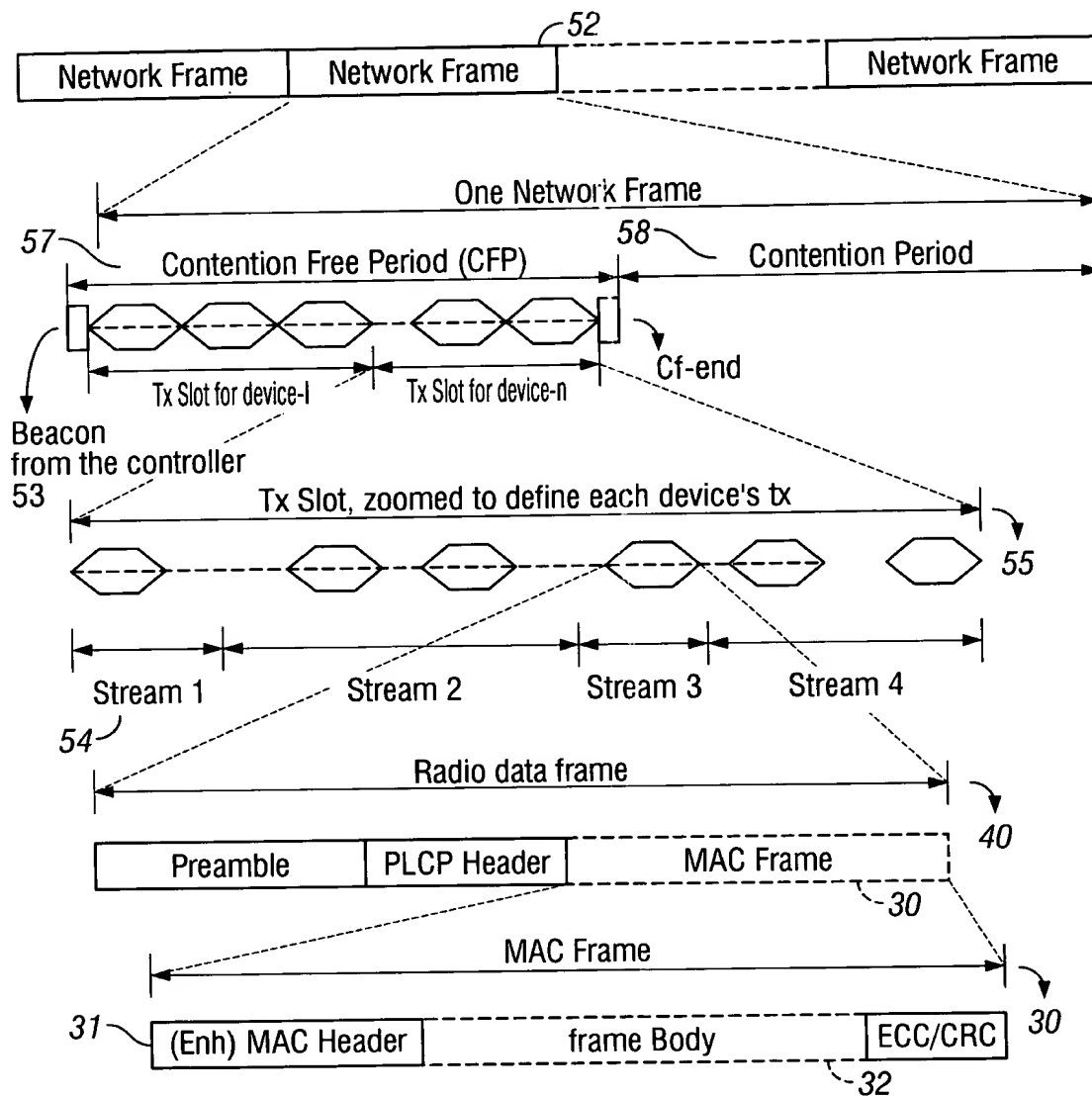


FIG. 3

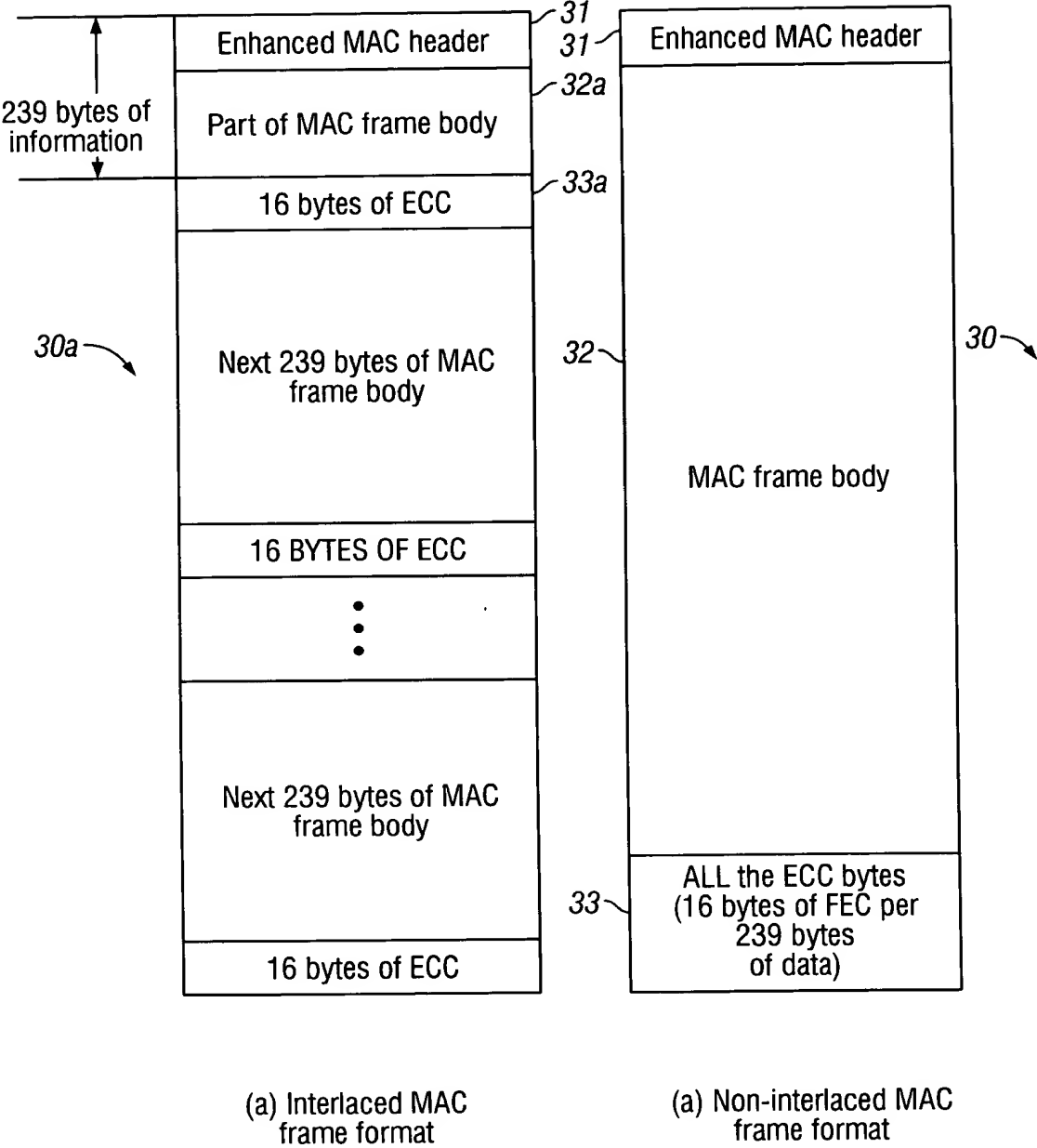
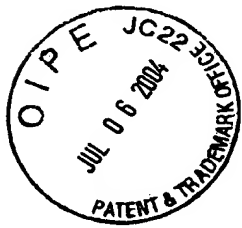
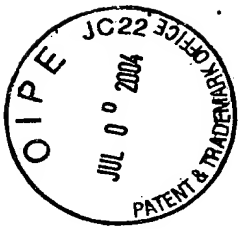


FIG. 4



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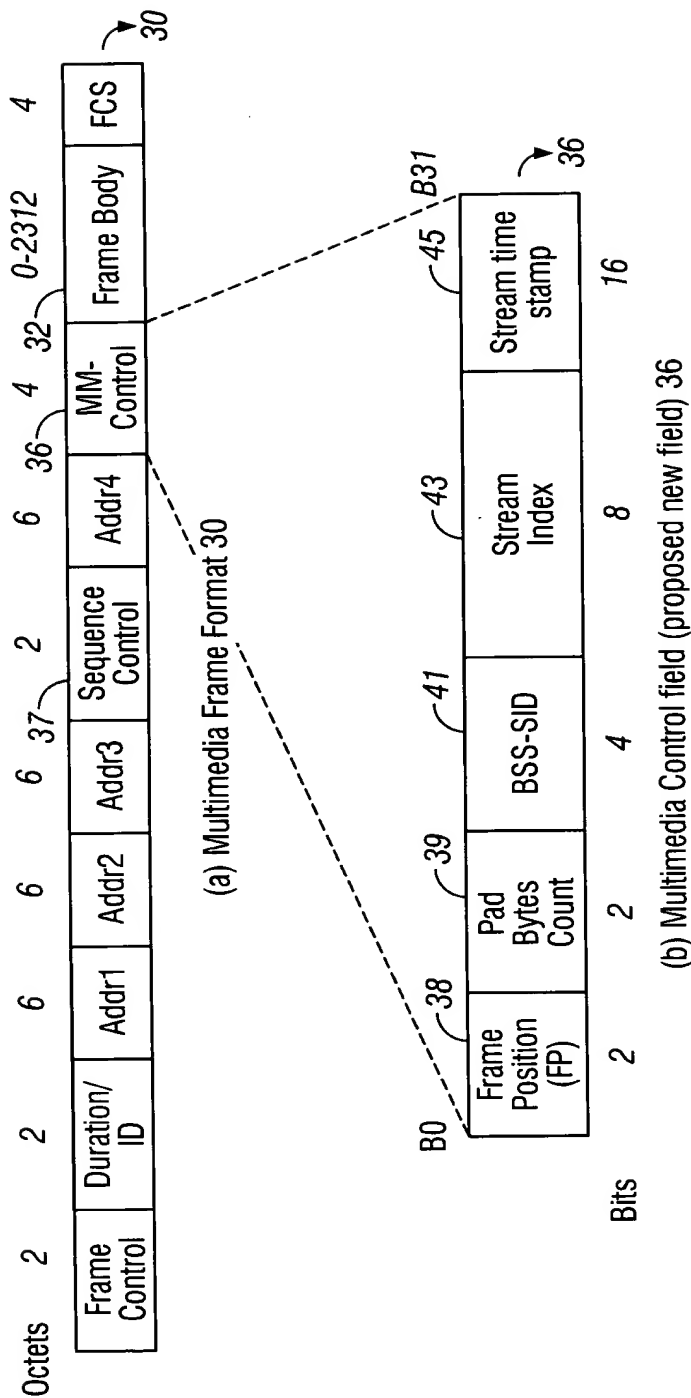


FIG. 5

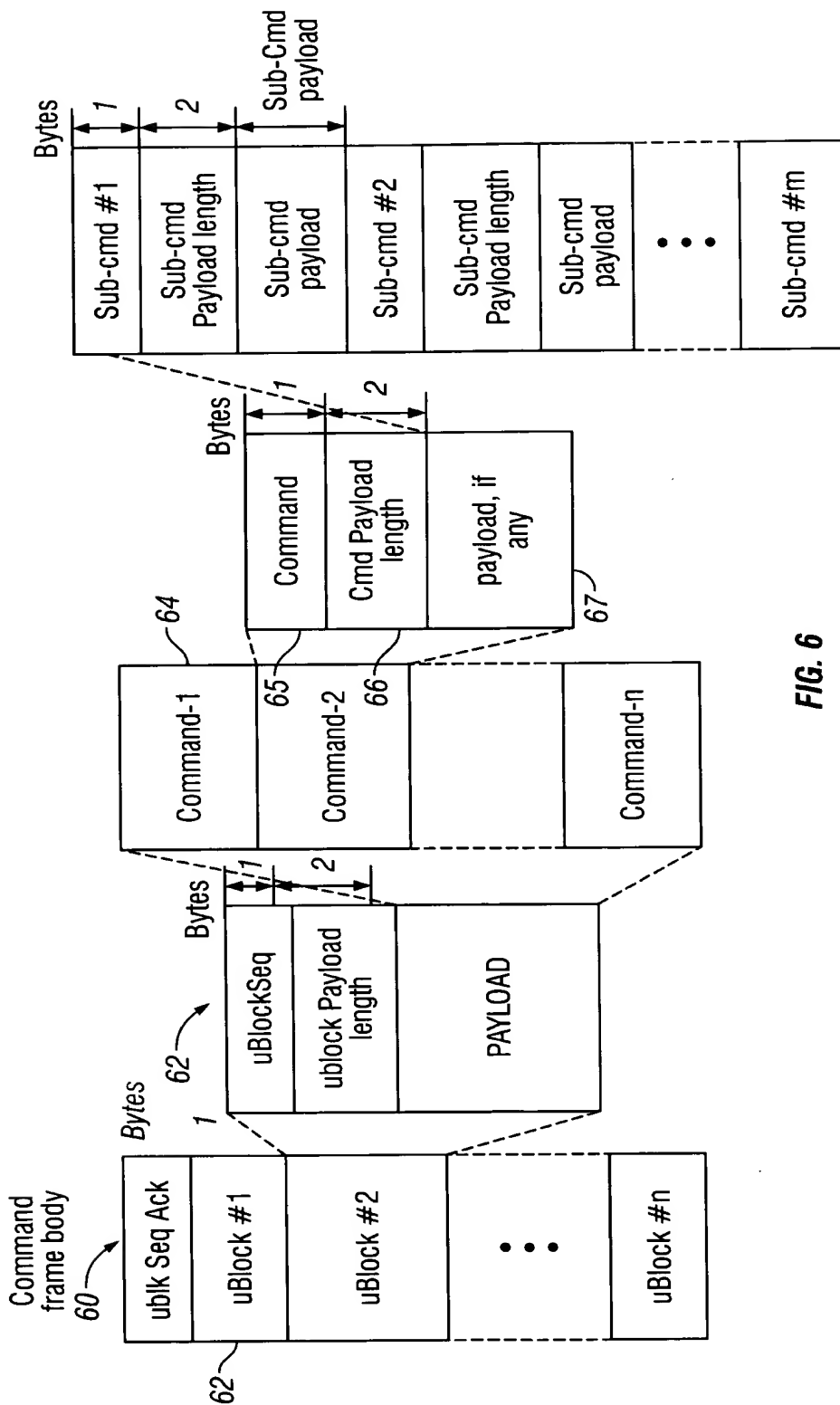


FIG. 6



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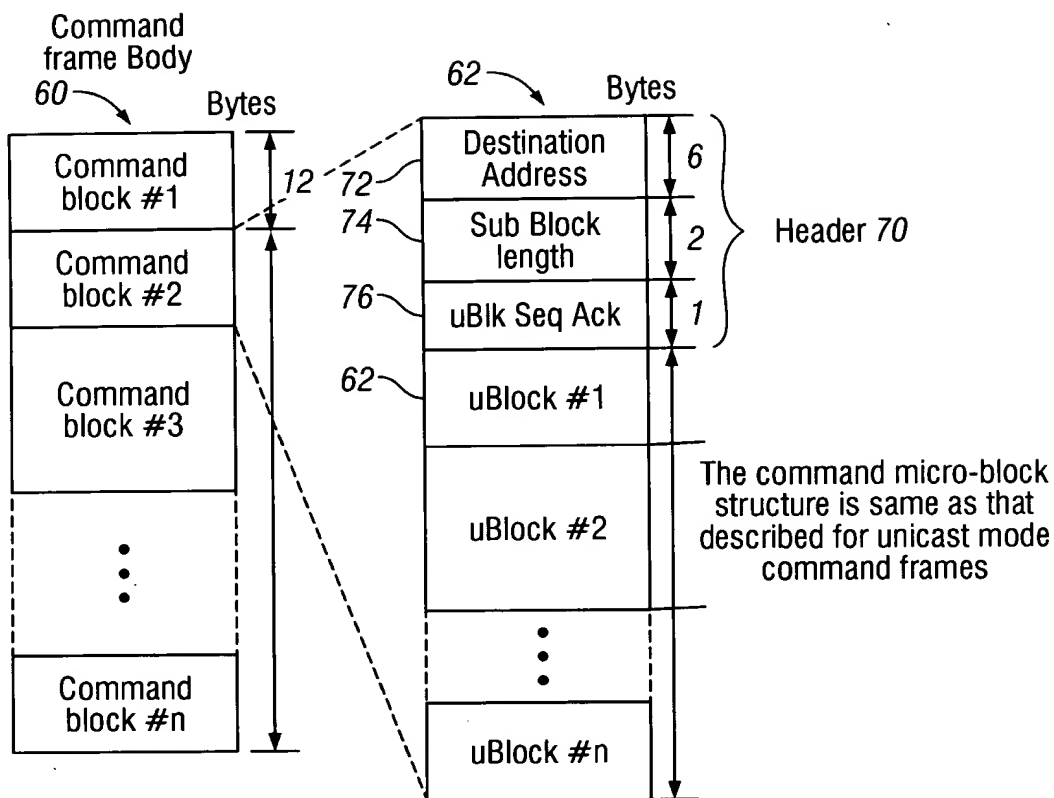


FIG. 7

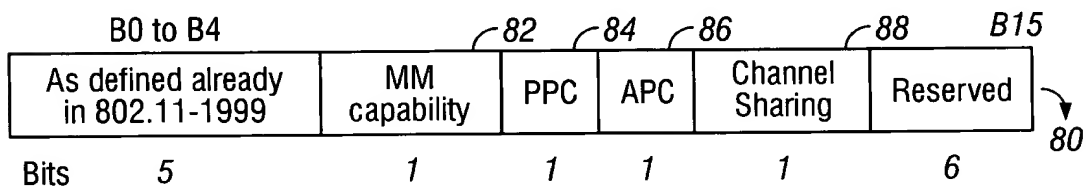


FIG. 8

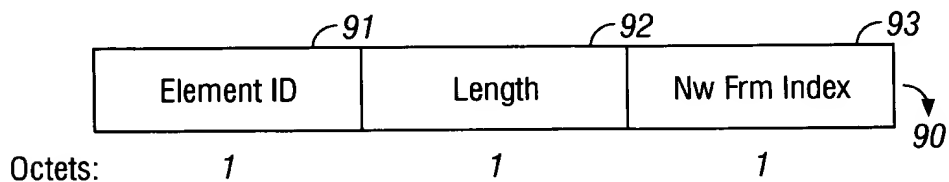


FIG. 9

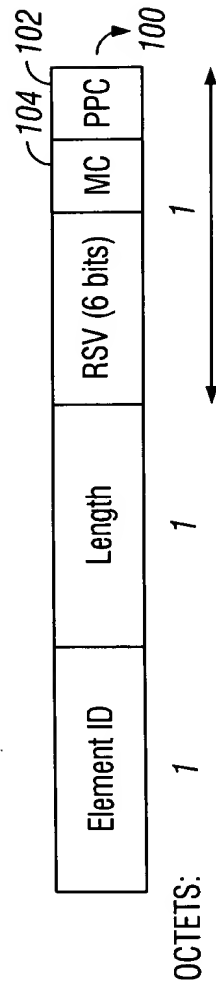


FIG. 10

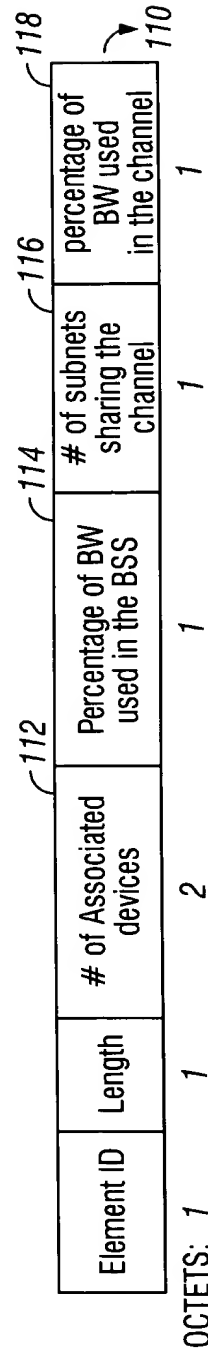


FIG. 11

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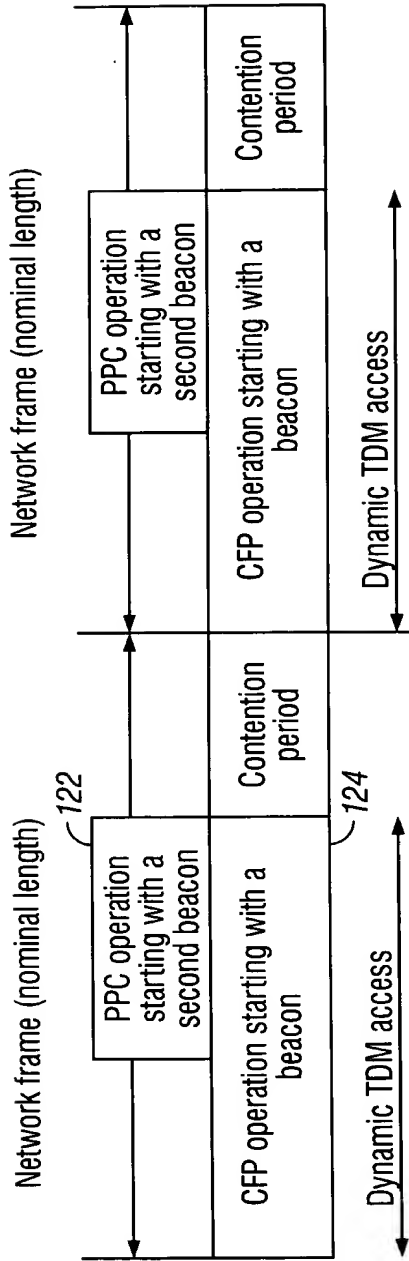


FIG. 12

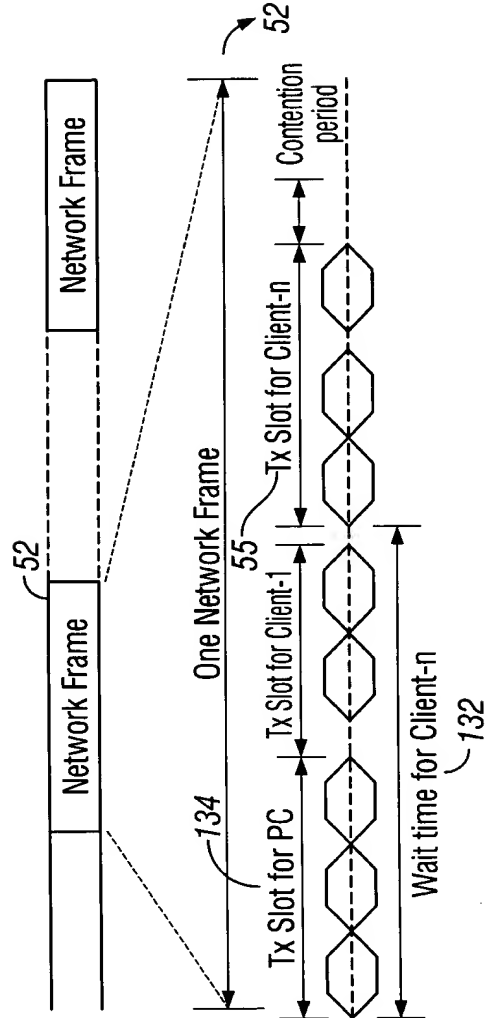


FIG. 13



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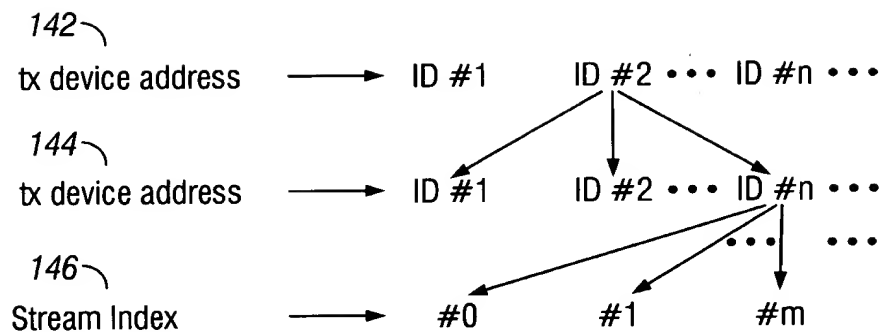


FIG. 14

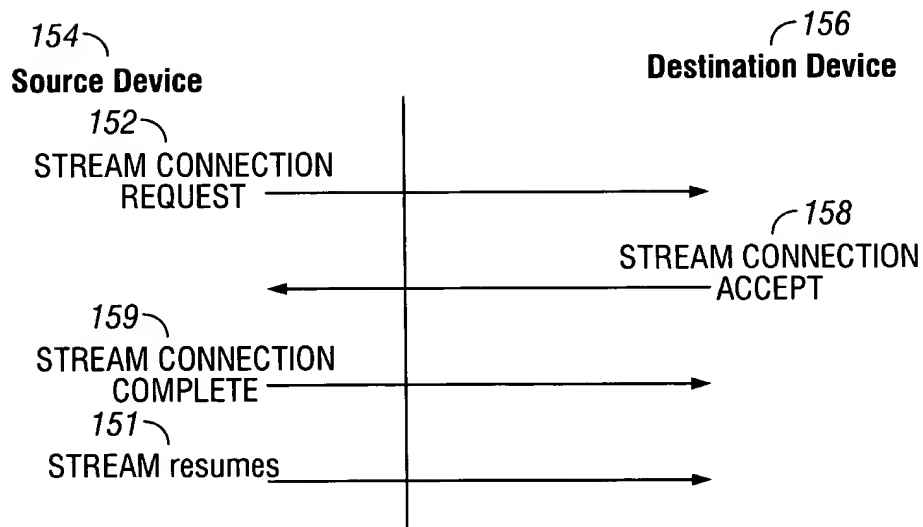


FIG. 15



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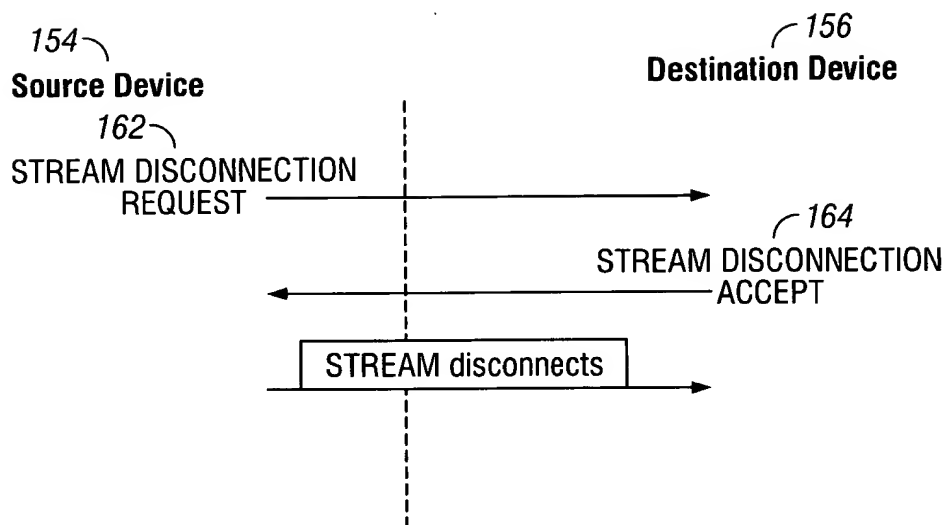


FIG. 16

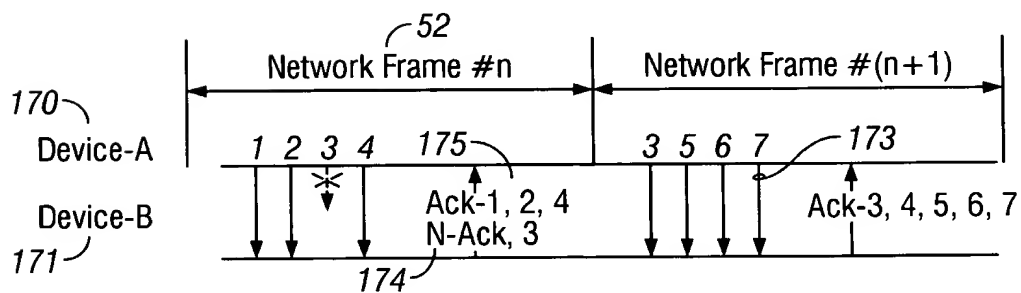
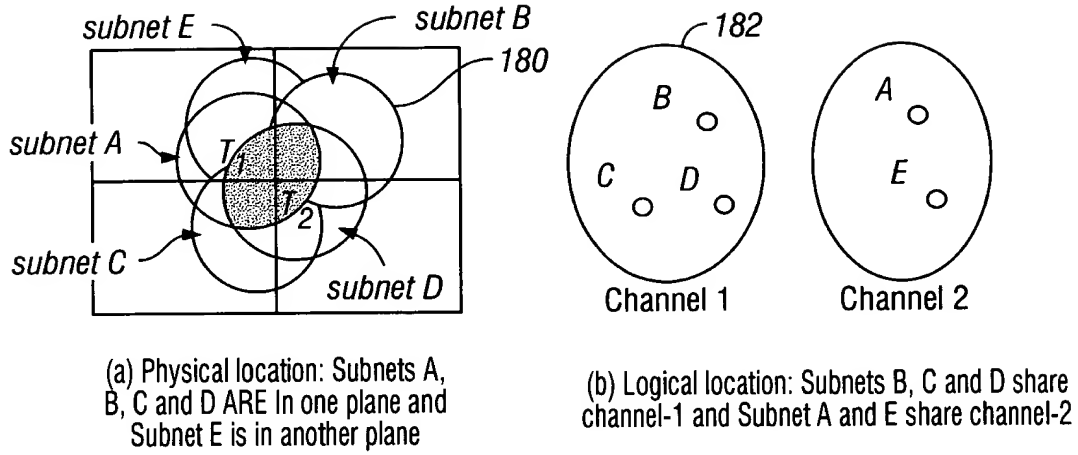


FIG. 17



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- Subnet B comes up first and assumes all zero BSS-SID in channel 1 with 10% bandwidth utilization
- Subnet A comes up next and assumes all zero BSS-SID in channel 2 with 80% bandwidth utilization
- Subnet D comes up:
 - Detects both channels being busy
 - Detects channel-1 with low bandwidth utilization and
 - Requests 30% bandwidth in channel-1
 - Subnet B and D share Channel 1 with 10% and 30% bandwidth usage respectively
- Subnet C comes up:
 - Detects both channels being busy
 - Detects channel-1 with low bandwidth utilization and
 - Requests 40% bandwidth in channel-1
 - Subnet B, C and D share Channel 1 with 10%, 40% and 30% bandwidth usage respectively
- Subnet E (not shown in picture) comes up:
 - Detects both channels being busy
 - Detects channel-1 and channel-2 with approximately same bandwidth utilization
 - Detects channel-2 with lower number of subnets
 - Requests 40% bandwidth in channel-2.

FIG. 18



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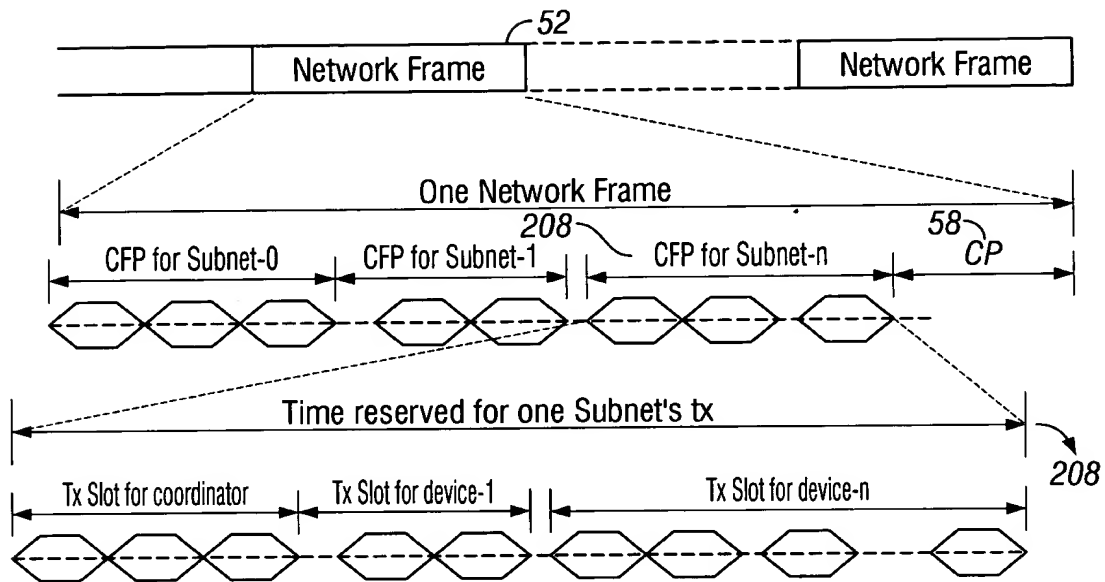


FIG. 19

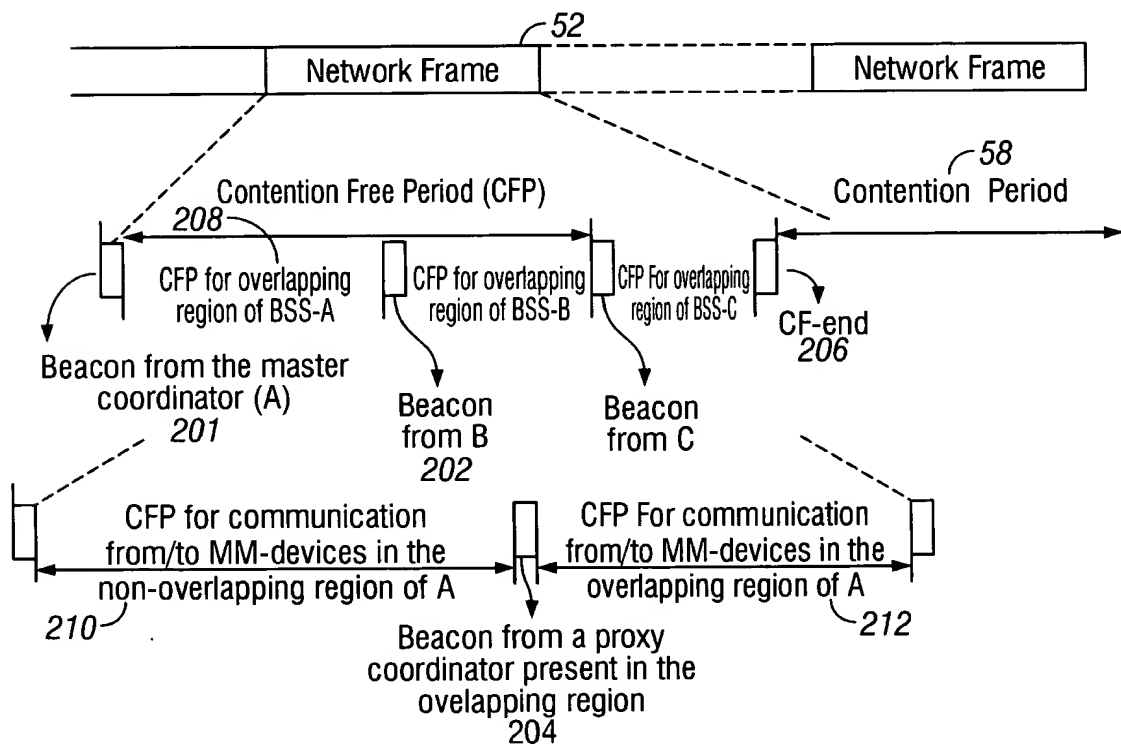
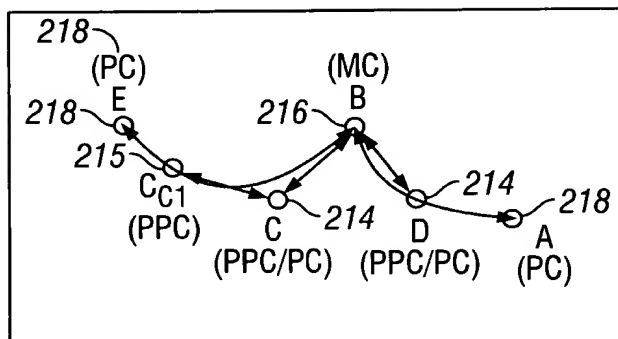
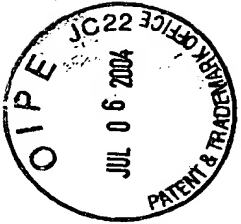


FIG. 20



- Subnet B comes up first and assumes all zero BSS-SID
- Subnet D comes up next and requests bandwidth sharing with B
- Subnet C comes up next and requests bandwidth sharing with B and D
- Subnet A comes up:
 - Subnet B can not detect A and/or A can not detect B
 - Subnet D detects both and reports to B that A is operating in the same channel
 - B assigns D to be proxy coordinator and sends request to D for bandwidth sharing. If A can detect any packets from B or D it can also send the same request.
 - D acts as tunnel between B and A.
 - A gets a invitation from B to join the already group existing group of B, C and D.
 - A gets assigned an SS-ID and its transmission always follows that of D
- Subnet E comes up:
 - Except C_{C1} no other device can detect E and or otherwise
 - E tries to use another channel and fails
 - There is only one option to E and that is to join the same group formed above, else it will be interfering with C_{C1}
 - C_{C1} detects request from E and reports to C that E is operating in the same channel
 - C tunnels the information to B.
 - B assigns C_{C1} , to be proxy coordinator and sends request to C for permission.
 - C authenticates the request and provides the permission.
 - C and C_{C1} together form a tunnel between B and E.
 - E gets assigned and SS-ID and its transmission always follows that of C_{C1} .

FIG. 21



<i>NULL Command</i>	1 Octet
---------------------	---------

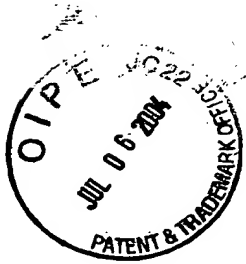
FIG. 22

<i>Stream Management</i>	1 Octet
Cmd Payload len	2 Octets
Subcommand structure	n Octets

FIG. 23

240	<i>Restart ALL Stream Connections (Ack)</i>	1 Octet
	Subcmd Payload len	2 Octets
	Time out Period (in TU)	3 Octets

FIG. 24



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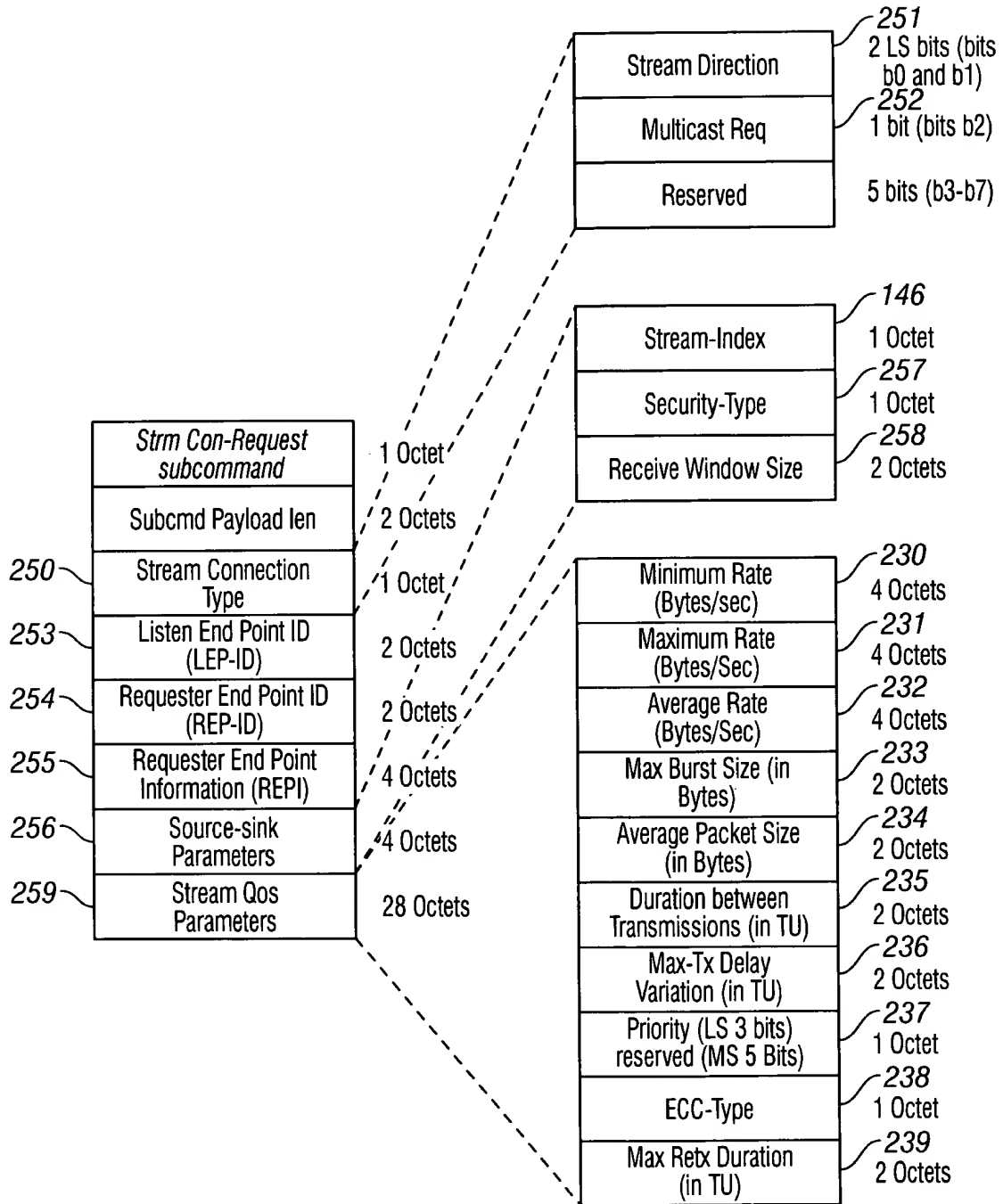
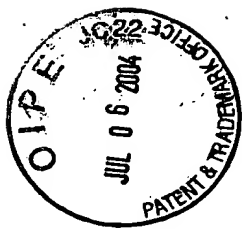


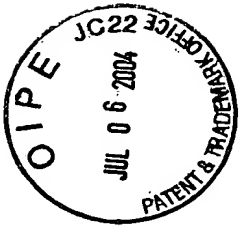
FIG. 25



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<i>Strm Con-Request subcommand</i>	1 Octet
Subcmd Payload len	2 Octets
Stream Connection Type	1 Octet
Listen End Point ID (LEP-ID)	2 Octets
Requester End Point (REP-ID)	2 Octets
Requester End Point Information (REPI)	4 Octets
Source-Sink Params for Tx-Stream	4 Octets
Stream Qos Params for Tx-Stream	28 Octets
Source-Sink Params for Rx-Stream	4 Octets
Stream Qos Params for Rx-Stream	28 Octets

FIG. 26



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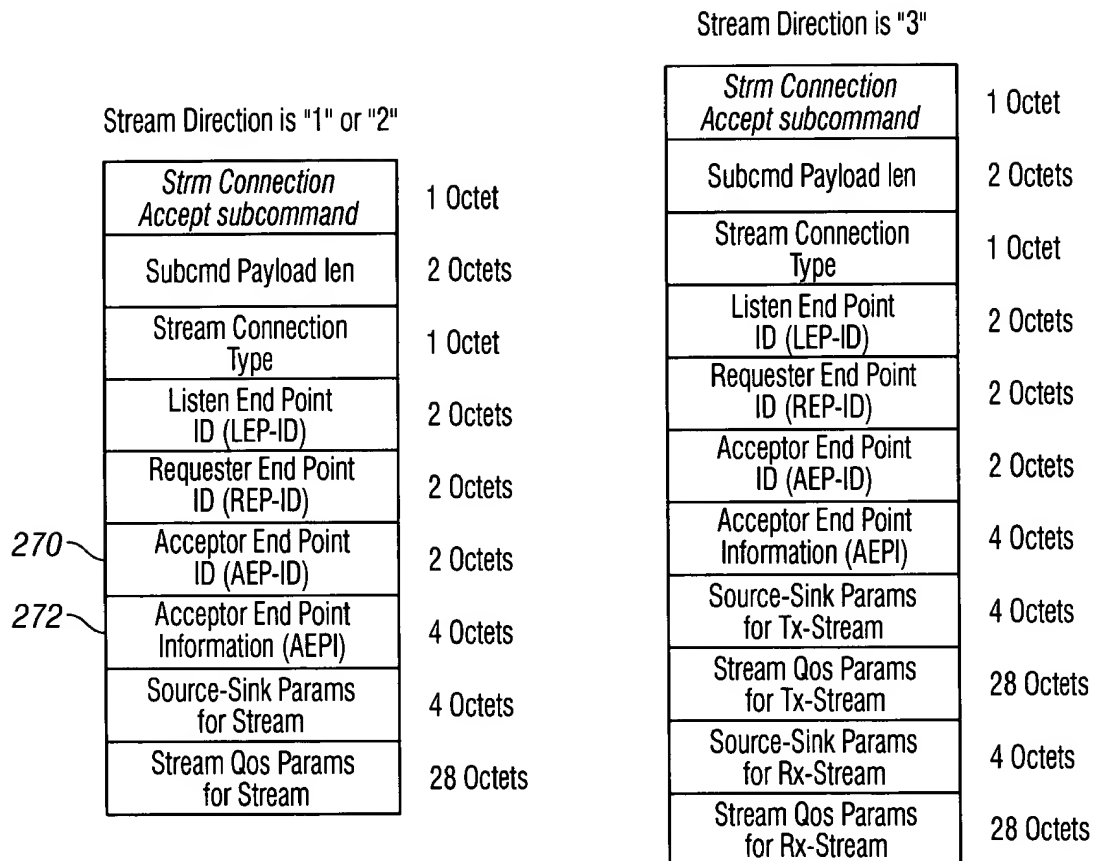
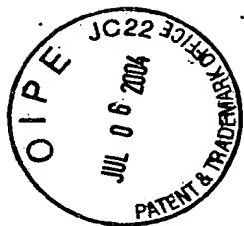


FIG. 27



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Stream Direction is '1' or '2' or 3

280	<i>Strm Connection reject subcommand</i>	1 Octet
	Subcmd Payload len	2 Octets
	Stream Connection Type	1 Octet
	Listen End Point ID (LEP-ID)	2 Octets
	Receiver End Point ID (RxEP-ID)	2 Octets
	Sender End Point ID (SEP-ID)	2 Octets
282	Receiver End Point Information (RxEP-Info)	4 Octets

FIG. 28

Stream Direction is '1' or '2' or '3'

Strm Disconnect/Ack subcommand	1 Octet
Subcmd Payload len	2 Octets
Stream Connection Type	1 Octet
Receiver End Point ID (RxEP-ID)	2 Octets
Sender End Point Information (SEP-ID)	2 Octets
Reason code	1 Octet
Stream Index for Tx-Stream	1 Octet
Stream Index for Rx-Stream	1 Octet

FIG. 29

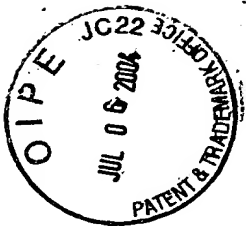
Stream Direction is '1' or '2'

300	<i>Stream Authorization Request/Grant/Reject</i>	1 Octet
	Subcmd Payload len	2 Octets
	Stream Connection Type	1 Octet
	Stream Index	1 Octet
	Listen End Point ID (LEP-ID)	2 Octets
	Rx Address	6 Octets
	Source-Sink Params for the stream	4 Octets
	Stream Qos Params for the Stream	28 Octets

FIG. 30

<i>DBM Command</i>	1 Octet
Cmd Payload len	2 Octets
Subcommand structure	n Octets

FIG. 31



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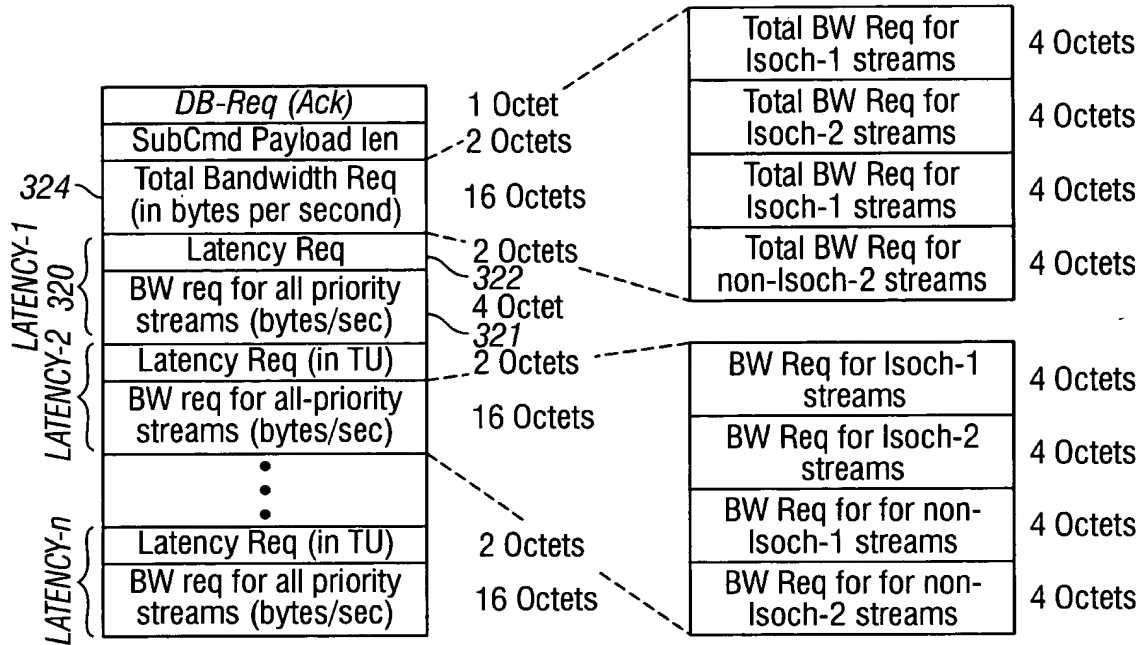


FIG. 32

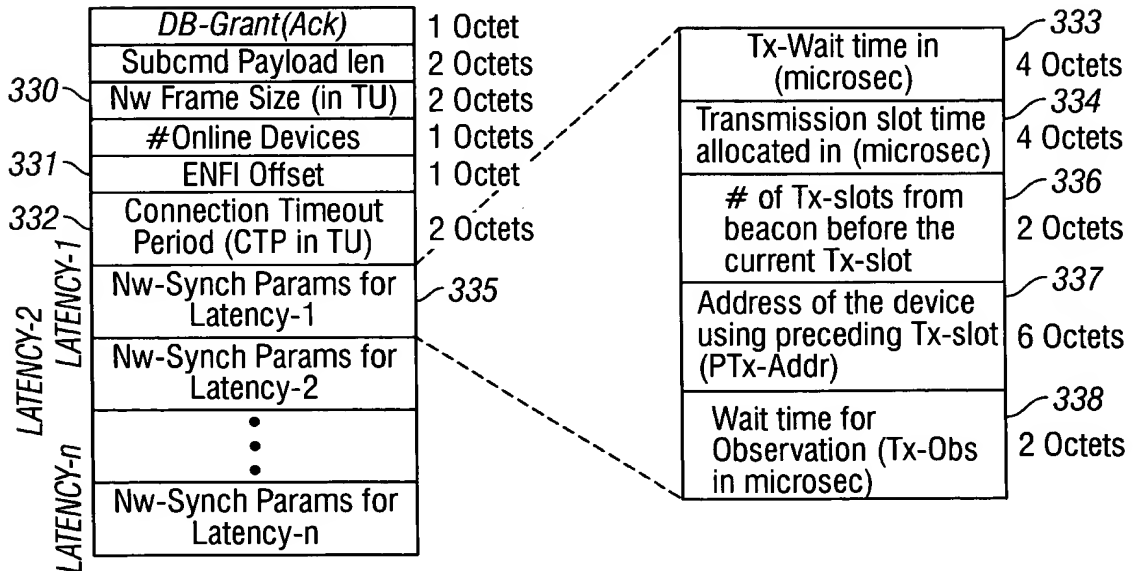


FIG. 33



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342	<i>Remain Quiet(Ack)</i>	1 Octet
	<i>CMD payload length</i>	2 Octets
	<i>Time Out Period (in TU)</i>	2 Octets

FIG. 34

352	<i>Change Channel (Ack)</i>	1 Octet
	<i>Cmd payload length</i>	2 Octets
	<i>Time Out Period (in TU)</i>	2 Octets

FIG. 35

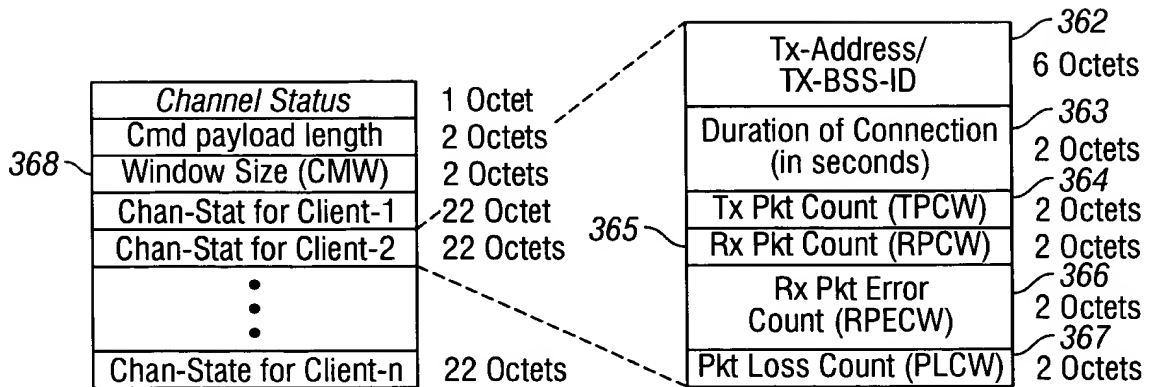


FIG. 36

<i>PC Redundancy Command</i>	1 Octet
Cmd Payload len	2 Octets
Subcommand structure	n Octets

FIG. 37

382	<i>PC Redundancy Negotiate subcmd</i>	1 Octet
	Subcmd Payload len	2 Octets
383	Max PHY Tx range	1 Octet
384	Max External connections	1 Octet
385	Active Ext connections	1 Octet
	Max PHY Rate	1 Octet

FIG. 38

<i>Proxy Service Command</i>	1 Octet
Cmd Payload len	2 Octets
Subcommand structure	n Octets

FIG. 39

<i>PPC Service Request subcommand</i>	1 Octet
Subcmd Payload len	2 Octets
Destination Addr-1	6 Octets
Stream Requirements	n Octets
Destination Addr-2	6 Octets
Stream Requirements	n Octets
⋮	
Destination Addr-n	6 Octets
Stream Requirements	n Octets

FIG. 40

411	<i>PM Provider Request subcommand</i>	1 Octet
414	Subcmd Payload len	2 Octets
412	Device Addr-1	6 Octets
	PLR-Measured	1 Octet
	Device Addr-2	6 Octets
	PLR-Measured	1 Octet

FIG. 41

422	<i>PPC service for subnet connection</i>	1 Octet
	Subcmd Payload len	2 Octets
	Embedded req-frame between the PCs	n Octets

FIG. 42



331	<i>PPC Permission Grant/Ack/Reject</i>	1 Octet
	Subcmd Payload Len	2 Octets
	ENFI offset	6 Octets
	Addr of Device-1	6 Octets
	PPC-1	6 Octets
	PPC-2	6 Octets
	⋮	
	PPC-n	6 Octets
	Addr of Device-2	6 Octets

FIG. 43

442	<i>PPC Service Break (Ack) subcommand</i>	1 Octet
	Subcmd Payload len	2 Octets
	CS-ID-1	1 Octets
	CS-ID-2	1 Octets
	Reason Code	1 Octet
	Time out period (in TU)	2 Octets

FIG. 44

	<i>PPC-OSB Provider Req/Accept/Reject/Ack</i>	1 Octet
	Subcmd Payload len	2 Octets
	Entire packet containing OSB-Req from another subnet	n Octets

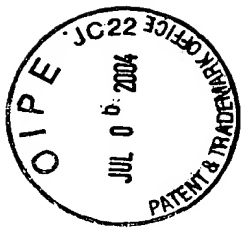
FIG. 45

	<i>PPC-OSB tunneling</i>	1 Octet
	Subcmd Payload len	2 Octets
	Entire packet containing OSB-command between the two subnets	n Octets

FIG. 46

	<i>PPC-OSB Relieve Req (Ack) subcommand</i>	1 Octet
	Subcmd Payload len	2 Octets
	BSS SID (LS 4 bits) Reserved (MS 4 bits)	1 Octets
	BSS ID	6 Octets

FIG. 47



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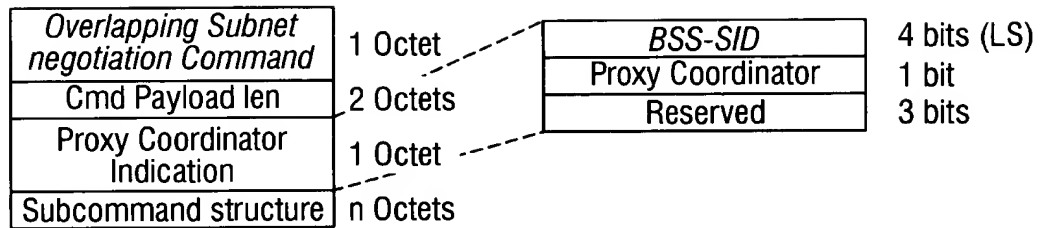


FIG. 48

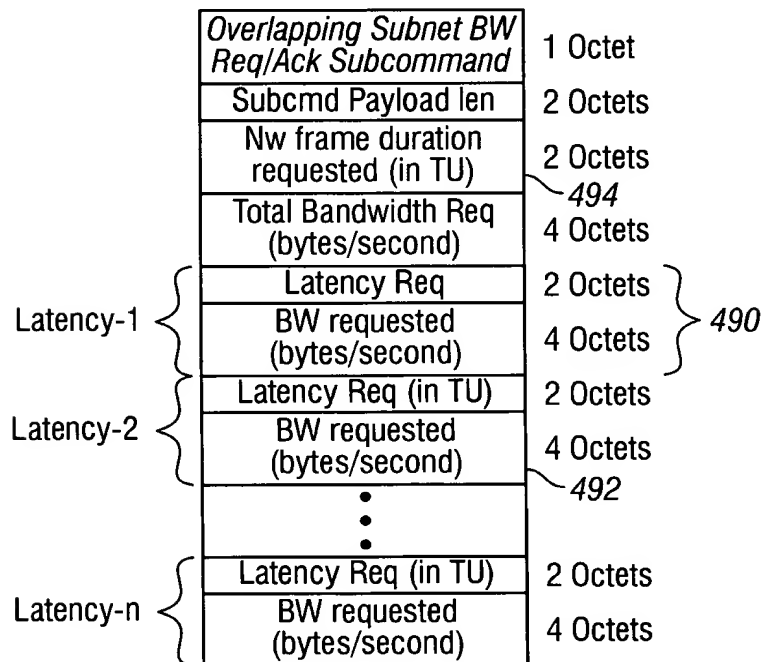
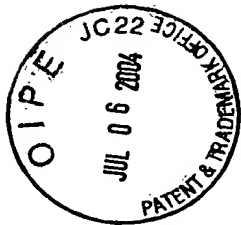


FIG. 49



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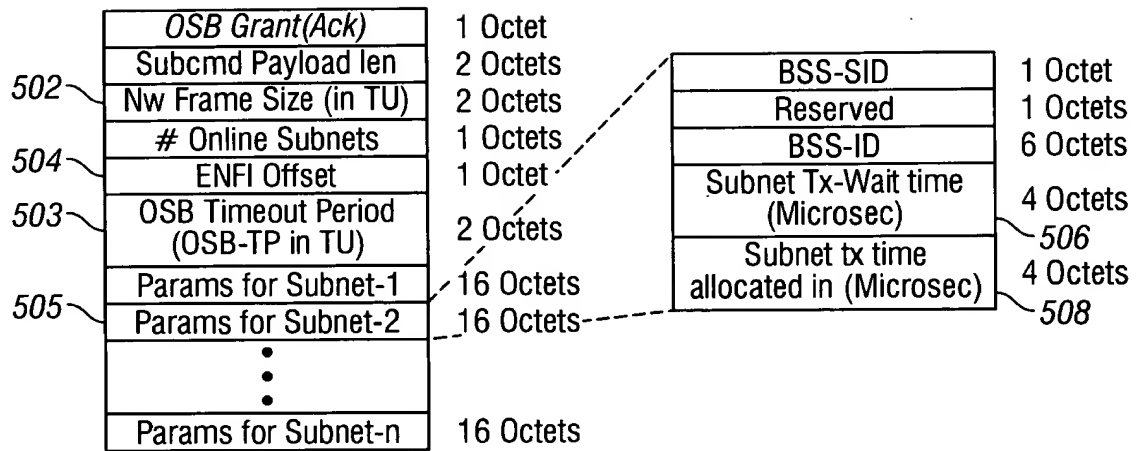


FIG. 50

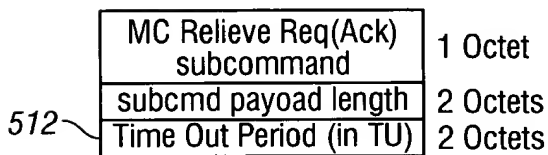


FIG. 51

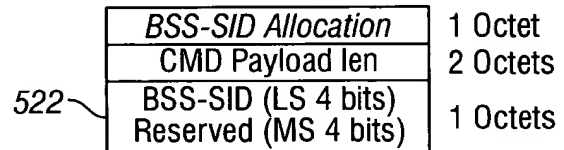


FIG. 52

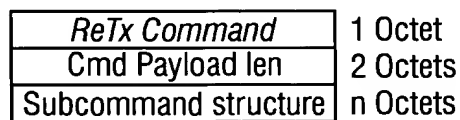


FIG. 53



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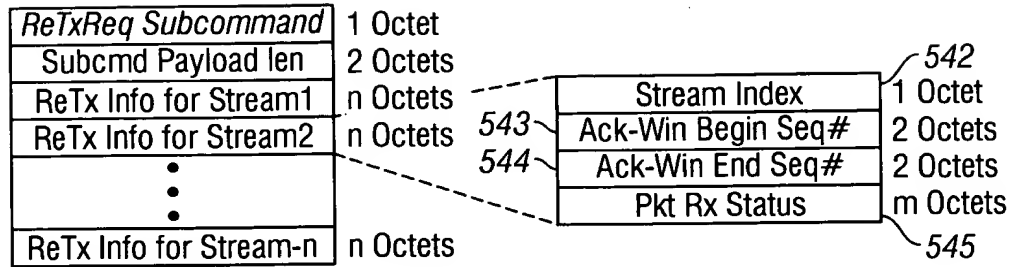


FIG. 54

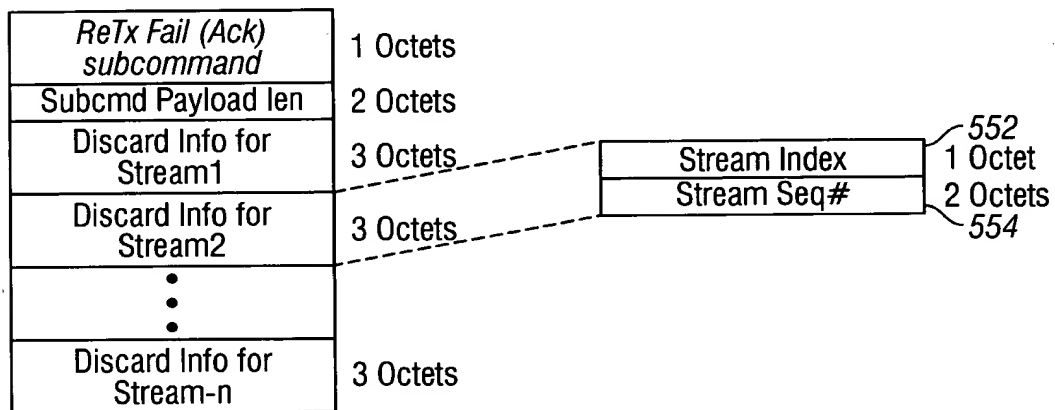


FIG. 55

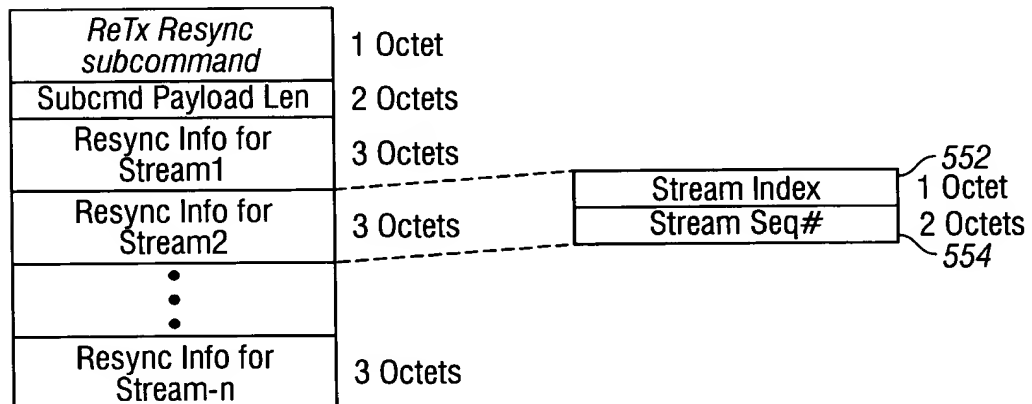


FIG. 56